

DIPLOMA IN AEROTROPOLIS INDUSTRY 4.0 (MECHATRONICS SKILLS)/BACHELOR OF ENGINEERING SCIENCE (6046)

Approved Abbreviation: DipAeroInd/BEngSc
Western Sydney University Program Code: 6046
AQF Level: 7

Students should follow the program structure for the session start date relevant to the year they commenced.

NOTE: This program is currently not taking any new enrolments.

This program has been suspended from 2023.

The fourth industrial revolution, also known as Industry 4.0, is affecting almost every industry worldwide and rapidly transforming how businesses operate. The Diploma in Aerotropolis Industry 4.0 (Mechatronics Skills) is designed to equip students with the relevant employability skills required to successfully navigate Aerotropolis Industry 4.0, in addition to equipping students with the skills, knowledge, and attributes required for further studies in Engineering. The Diploma presents students with subjects from the first year of the Bachelor of Engineering Science degree and the Bachelor of Engineering (Honours). The Diploma is designed to develop student's ability to work autonomously, work within teams, problem solve real-world issues within their field, as well as offering a cultural induction in to the Aerotropolis Industry.

The first year of this program is delivered online by Western Sydney University, The College as an agent of Western Sydney University, in an environment focused specifically on supporting students to make the transition into university study.

A Diploma in Aerotropolis Industry 4.0 (Mechatronics Skills) (<https://hbook.westernsydney.edu.au/archives/2024-2025/programs/diploma-aerotropolis-industry-40-mechatronics-skills/>) exit point is available at the end of the first year of the program.

For more information on Western Sydney University, The College, please refer to their web site.

Western Sydney University, The College (<https://www.westernsydney.edu.au/future/study/application-pathways/the-college.html>)

For program advice during your first year of study, please use the contact below under 'Program Advice'. For program advice during your second and subsequent years of study, please use the contact listed for the Bachelor of Bachelor of Engineering Science.

Bachelor of Engineering Science (<http://handbook.westernsydney.edu.au/hbook/course.aspx?course=3691.5>)

Early Exit

Students may exit this program on completion of 80 credit points with a 7178 Diploma in Aerotropolis Industry 4.0 (Mechatronics Skills) (<https://hbook.westernsydney.edu.au/archives/2024-2025/programs/diploma-aerotropolis-industry-40-mechatronics-skills/>)

Study Mode

Three years full-time

Program Advice

College Program Enquiries

Prospective students should visit the following websites for general enquiries about this program.

Enquire about this program (<https://enquiry.westernsydney.edu.au/courseenquiry/>) | Local Admission (<https://www.westernsydney.edu.au/future/>) | International Admission (<https://www.westernsydney.edu.au/international/home/apply/admissions/>) |

Location

Campus	Attendance	Mode	Advice
Online	Full Time	Online	See above
Parramatta Campus - Victoria Road	Full Time	Internal	See above
Parramatta Campus - Victoria Road	Part Time	Internal	See above
Penrith Campus	Full Time	Internal	See above
Penrith Campus	Part Time	Internal	See above

Inherent Requirements

There are inherent requirements for this program that you must meet in order to complete your program and graduate. Make sure you read and understand the requirements for this program online.

Inherent Requirements (https://www.westernsydney.edu.au/ir/inherent_requirements/inherent_requirements_for_engineering_courses/)

Work Integrated Learning

Western Sydney University seeks to enhance student learning experiences by enabling students to engage in the culture, expectations and practices of their profession or discipline. This program includes a placement or other community-based unpaid practical experience.

There is a mandatory work component required for completion of this program. Please contact the Program Advisor listed above for information.

Completion of Year 12 with specified ATAR to be determined year by year, or completed Certificate III or higher, or equivalent work experience.

Equivalent experience includes

- Minimum of 1-year full time equivalent Trade work experience; or
- 2 years' full time equivalent Professional work experience; or
- 5 years' General work experience.

Applicants seeking admission on the basis of work experience must support their application with a Statement of Service for all work experience listed on the application.

Statement of Service form (https://www.westernsydney.edu.au/content/dam/digital/pdf/Statement_of_Service.PDF)

Assumed Knowledge: Two subjects of Science and two subjects Mathematics (not General Mathematics).

Qualification for this award requires the successful completion of 240 credit points which include the subjects listed in the recommended sequence below.

Robotics and Mechatronics, Testamur Major (T037) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/robotics-mechatronics-ug-testamur-major/>)

The early exit College Diploma consists of 80 credit points which includes two College Preparatory Western Sydney University The College Subjects.

Recommended Sequence

Western Sydney University The College Subjects

Subject	Title	Credit Points
1st Block		
ENGR 1049	Introduction to Engineering Practice (Block)	10
2nd Block		
ELEC 1011	Engineering Computing (Block)	10
3rd Block		
MATH 1036	Mathematics for Engineers Preliminary (UG Cert)	10
4th Block		
ENGR 1051	Engineering Physics (Block)	10
5th Block		
ENGR 1048	Engineering Materials (UG Cert)	10
6th Block		
ELEC 1012	Electrical Fundamentals (Block)	10
7th Block		
ENGR 1052	Fundamentals of Mechanics (Block)	10
Total Credit Points		70

Students may exit at this point and graduate with the Diploma in Aerotropolis Industry 4.0 (Mechatronics Skills) (<https://hbook.westernsydney.edu.au/archives/2024-2025/programs/diploma-aerotropolis-industry-40-mechatronics-skills/>) following a passing grade in all of the above subjects. Students who progress onto Year Two may also be awarded the Diploma if they gain a passing grade in all of the above subjects.

Students must pass at least 70 credit points of University level subjects in Year One before progressing to the Year Two subjects.

Western Sydney University Subjects

For program advice during your second and subsequent years of study, please use the contact listed for the Bachelor of Engineering Science

Bachelor of Engineering Science (<http://handbook.westernsydney.edu.au/hbook/course.aspx?course=3691.5>)

Year 2 - Year 3

Students must then select one of the following majors

Penrith and Parramatta Campuses

Civil, Testamur Major (T033) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/civil-ug-pg-testamur-major/>)

Construction, Testamur Major (T034) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/construction-ug-pg-testamur-major/>)

Electrical, Testamur Major (T035) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/electrical-ug-pg-testamur-major/>)

Mechanical, Testamur Major (T036) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/mechanical-ug-pg-testamur-major/>)